

XXII. *Descriptions of new species of holophthalmous Ascalaphidæ.* By ROBERT McLACHLAN, F.R.S., &c., Treasurer, Ent. Soc. Lond.

[Read November 4th, 1891.]

THE species herein described are as follows:—

Ptynx furciger. Arizona.

Campylophlebia (n. g.) *magnifica.* Cameroons.

Idricerus Elwesii. Darjeeling.

Idricerus japonicus. Japan.

Idricerus (?) *Albardanus.* Mesopotamia.

Four of these are in my collection; the other has been obligingly communicated by Mr. Herman Albarda, of Leeuwarden.

The generic term *Cormodes*, McLach. (preoccupied), is changed to *Allocormodes*.

Ptynx furciger, n. sp.

Antennæ yellowish-brown, paler at the base of each joint and before the club, which is blackish-brown, paler in the concave portion above. Head above blackish, with broad yellow eye-margins, clothed with dense blackish-cinereous pilosity; face wholly pale yellow, with whitish-yellow pilosity; mandibles shining piceous at the tips; palpi pale yellow, the terminal joint more testaceous; back of head pale yellow. Eyes blackish, finely reticulated with cinereous. Thorax blackish above, with blackish-cinereous pilosity, and two subparallel distant yellow longitudinal bands; sides and pectus very densely clothed with hoary white silken pilosity; some yellow spots under the wings. Legs clothed with hoary pilosity, tibiæ and tarsi with black spines; femora black, yellow at the apex; tibiæ yellow, fuscous internally; tarsi and claws piceous. Abdomen slender, slightly shorter and more robust in the ♀; colour more or less cinereous: in the ♂ the 2nd and 3rd segments above are clothed with dense straight outstanding cinereous hairs, and at the end of the third segment there is a narrow semi-erect yellow dorsal valve or process (about 2 mm. long), concave beneath, narrow at the base, widened at the apex, which is very deeply notched or slightly furcate; on the 4th and

5th segments, and indistinctly on those succeeding, there is, above, a velvety black interrupted line on each side, and a similar transverse line at the end of the segments, interrupted in the middle; beneath, the basal segments are yellowish, with three shining black interrupted lines, and similar black semicircles at the segmental divisions; apex above yellowish, and there is a pair of short, stout, yellow appendages, somewhat thickened towards the obtuse apices, and with strong black outstanding hairs; in the ♀ the black velvety lines above are more defined and complete. Wings of the form and structure usual in the genus; vitreous, the subcostal area infuscated; neuration black, radius and a few basal nervules whitish-yellow; pterostigma consisting of a small infuscate mark on thickened nervules (not strictly defined); 40—45 ante-pterostigmatical costal nervules, whereof the last 3 or 4 are often connected; post-stigmatical area with 4—5 oblique rows of cellules. Length of body, 31—32 mm. Expanse of wings, 80—85 mm.

Hab. Arizona (*H. K. Morrison*). Three males, two females, in my collection.

Of the same size and form as *P. appendiculatus*, F., and much resembling it, differing slightly in the costal area not being infuscate, and especially in the furcate process on the dorsum of the 3rd abdominal segment in the ♂, of which there is not a vestige in *P. appendiculatus*. There is similarity in the colour of thorax, legs, and wings to *P. juvenilis*, McLach., from Texas. The single type of this has lost the abdomen; its size is so much smaller (exp. 70 mm.) that it can scarcely be the same. Moreover, in a letter received from Dr. Hagen soon after the publication of my 'Classification of the *Ascalaphidæ*,' he gives a running commentary on the results of a comparison of that work with the materials in his collection, and says he possesses one ♂ of *A. juvenilis* from Texas, and makes no mention of the structural peculiarity in the dorsum of the abdomen, which he would certainly have done had it been present.

CAMPYLOPHLEBIA,* n. g.

Wings elongate, broad, of nearly equal form, the posterior somewhat narrower and shorter; the anterior excised at the extreme

* In placing this genus in the *Holophthalmi* it is necessary to state that the eyes in the single type are badly crushed, but in one of them I can see nearly the whole of the basal circumference, and do not detect indications of any dividing line.

base, not appendiculate, the anal angle not prominent; a broad, brown, *blistered* fascia occupying most of the apical portion of each wing, and a similar blistered mark at the end of the two cubiti, the neuration in these blistered portions being extremely dense, and composed of a multitude of minute cellules, neuration otherwise open; costal nervules in anterior wings not numerous, after the base arranged irregularly in pairs or threes; in both pairs of wings the ends of the longitudinal nervures where they enter the dark blistered portion are bent downwards in a sinuous manner, the lower branches of the sector radii, and the ends of the two cubiti, entering the inner margin nearly vertically, but very sinuous; the branch of the lower cubitus ill-defined: in the posterior wing the costal margin is slightly elevated before the apex (scarcely so in anterior). Antennæ nearly two-thirds the length of the anterior wings, straight, simple; club gradual and elongate. Thorax very slightly hairy. Abdomen short, moderately stout. Legs short; spurs of posterior tibiæ scarcely longer than first two tarsal joints.

The magnificent insect upon which this genus is founded is amongst the largest of described *Ascalaphidæ*, being equalled only by some forms of *Haploglenius*.

The foot-note indicates the bare possibility of its not being truly holophthalmous. In any case it forms a remarkable genus, on account of the blistered coloured portions of the wings, and the very dense reticulation and abrupt downward direction of the ends of the principal nervures in these coloured portions. Such "blistering" occurs in the markings of some *Myrmeleonidæ*, *Chryso-pidæ*, &c., and is there, as here, accompanied by dense network, the physiological significance of which remains to be explained.

Campylophlebia magnifica, n. sp.

Antennæ pale brown, the base of each joint yellowish; club dark brown. Head (much crushed) cinereous (varied with black?); a dense tuft of black hairs between the antennæ; face yellowish (varied with black?). Eyes bronzy black. Thorax cinereous above, with blackish spots on the lobes; beneath blackish, with yellowish spots on the sides below the wings; metasternum cinereous. Legs pale yellow; anterior tibiæ blackish externally; tarsi black; spurs and claws dark piceous; coxæ and base of femora clothed with hoary hairs. Abdomen above brown, the greater part of the 2nd and 3rd segments, and a large space on the 4th, cinereous; beneath blackish, the anterior half of the 3rd

segment yellowish-cinereous (the whole abdomen discoloured in drying). Wings vitreous with brown, mostly paired, oblong spots in the subcostal area in both wings, except towards the base; the apex occupied by a broad irregular brown blistered band, densely reticulated by whitish yellow, and bearing two large whitish spots on the apical margin, divided by a narrow prolongation of the dark band; a nearly vertical blistered brown line between the ends of the two cubiti on the inner margin, with a slight darker clouding outside the apex of the line; subcosta conspicuously pale yellow, with black lines beneath the paired (or grouped) costal nervules; neuration otherwise mostly black (except at the apex), but several of the longitudinal nervules, and their chief branches, are finely yellowish; pterostigma pale yellowish, with 5 or 6 furcate or bifurcate nervules: costal nervules about 40 in the anterior wings, the first eight regular, afterwards they are grouped in pairs or threes, with long free spaces between the groups (in the posterior wings this grouping is less defined); post-stigmatal area broad, occupied by about 6 rows of minute cellules; about 6 rows (5 in the posterior) of somewhat irregular cellules between the lower cubitus and the inner margin; sector radii with two principal branches, but the upper is tri- or quadri-furcate. Length of body, 31 mm. Expanse of wings, 115 mm. Length of anterior wing, 55 mm.; greatest breadth, 15 mm. Length of posterior wing, 52 mm.

Hab. West Africa (Cameroons, *D. G. Rutherford*). One ♀ in my collection.

ALLOCORMODES, new name.

= *Cormodes*, McLach., Journ. Linn. Soc. Lond., Zool., xi., p. 239 (1871); preoccupied by Pascoe in Coleoptera, Journ. of Entomol., i., p. 44 (1861).

Idricerus Elvesii, n. sp.

Antennæ yellowish, narrowly annulated with black at the sutures; club dark brown. Head black, with dense black villosity above, and between the antennæ; face black; labrum yellow; palpi testaceous; eyes bronzy. Thorax greyish-brown, slightly yellowish beneath, with blackish pubescence above, which becomes whitish on the pleuræ and breast. Legs reddish, base of tibiæ, and the tarsi wholly, black; spurs dark piceous, those on the posterior tibiæ scarcely so long as the first two tarsal joints; claws dark piceous. Abdomen stout in the basal half, afterwards more slender to the apex, which is obtuse: colour above velvety black, with a piceous tinge; beneath yellowish-ochreous in the basal half, with

a broad central blackish longitudinal band, glaucous bluish in the attenuated apical portion. Wings vitreous; the inner margin dilated before the termination of the cubiti; anal angle of anterior rounded, thickened, not followed by an excision: neuration rather open, blackish, but all the principal longitudinal nervures are yellowish; pterostigma small, nearly vitreous, but with three yellowish nervules, of which the first is furcate; about 35 costal nervules before the pterostigma; post-stigmatal area with three rows of hexagonal or pentagonal cellules, those on the costal margin the smallest; four rows of cellules between the lower cubitus and the inner margin. Length of body, about 35 mm. (distorted). Expanse of wings, 82 mm. Length of anterior wing, 39 mm.; greatest breadth, 11 mm. Length of posterior wing, 33 mm.

Hab. Darjeeling (*H. J. Elwes*, July, 1886); one ♀ in my collection, kindly given to me by Mr. Pascoe.

Agreeing in general form and structure with the typical *I. decrepitus*, Wlk.

It cannot be identical with the lost "*Ascalaphus (Haploglenius) obscurus*," Westw. (Cab. Or. Ent.), also an Indian species, which, according to the short diagnosis, should be very much smaller, differently marked on the body, and having the claws longer than the tarsi (in *I. Elwesii* they are scarcely longer than the last tarsal joint), &c.

Idricerus japonicus, n. sp.

Antennæ blackish-piceous, the club deep black. Body black. Head above and between the antennæ clothed with dense black pilosity, which becomes cinereous on the face; clypeus, labrum, and lower orbits yellow. Eyes bronzy (perhaps reddish or purplish in life). Thorax with black pilosity above, and cinereous on the sides and beneath (often nearly wholly cinereous in the ♀). Legs shining black, reddish at the junction of femora and tibiæ; spurs of the posterior tibiæ as long as the first two tarsal joints. Abdomen glaucous beneath, with black segmental divisions; above it is black, with short concolorous hairs, and in some individuals there is a reddish mark at the sides of the basal segmental divisions: the abdomen is comparatively slender in the ♂, but enormously stout in the ♀ (perhaps only before the eggs are laid): in the ♂ there are no prominent anal appendages, but the ventral surface ends in a small triangular plate. Wings having the costal and inner margins nearly parallel, the anterior pair not appendiculated, but the anal angle is prominent; vitreous, the subcostal area often slightly infuscated (in very adult individuals the wings are sometimes

wholly or in part tinged with fuliginous) : neuration black, network moderately dense : pterostigma small, well-defined, its outer side very oblique, dark brown, with 3 or 4 deep black nervules : 26—35 ante-pterostigmatic costal nervules in the anterior wings ; post-stigmatal area broad, with three rows of regular angular cellules, of which the costal row is very small, and the others large (the lower the largest) ; 4—5 rows of cellules between the lower cubitus and the inner margin in the anterior wings, 3 in the posterior. Length of body, 29—34 mm. Expanse of wings, 72—90 mm. Length of anterior wing, 34—42 mm. ; greatest breadth, 8—10 mm. Length of posterior wing, 28—35 mm.

Hab. Japan (*Pryer, Lewis, &c.*), where it is apparently very common. I have ten examples of both sexes before me, and have seen many more.

This may be considered quite congeneric with the typical *I. decrepitus*, Walker ; the spurs of the tibiæ are slightly longer, and the post-stigmatal area is broader (it contains only two rows of cellules in *I. decrepitus* and *I. sogdianus*).

Idricerus (?) *Albardanus*, n. sp.

(Antennæ wanting). Head above fuscous, with obscure paler spots, clothed with dusky cinereous pilosity, and a tuft of whitish hairs between the antennæ : face yellowish-grey, a fringe of long curved fuscous hairs on the clypeus ; palpi concolorous with the face. Eyes black, densely reticulated with grey, the reticulation coarser and more open in the lower portion. Thorax fuscous, densely clothed with dusky cinereous pilosity above, which becomes almost white on the breast and beneath ; above are indications of yellowish markings, especially on the scutellum of the meso- and meta-nota. Legs pale yellow, with long dense whitish hairs on the femora, becoming mixed with blackish on the tibiæ ; tarsi faintly annulated with brownish at the extremity of the first four joints ; spurs and claws testaceous. Abdomen slender, blackish, sparsely clothed with short blackish hairs ; above, the segmental divisions (except in apical portion), and the base of segments 4—6, are yellowish white, and beneath, the apical half of segments 3—4 is of the same colour : on the dorsum of the abdomen, segment 3 is produced at the apex into a *semi-erect, narrowly triangular acute valve-like process*, which is concave and pale yellowish if viewed from behind, viewed in front it is fuscous, densely clothed with black hairs, with pale yellowish margins and apex ; apex of abdomen with black spinose hairs ; no prominent anal

appendages. Wings uniformly dark fuliginous, darker towards the base, with slightly brassy reflections in certain lights; pterostigma small, but conspicuously whitish, traversed by 3 or 4 dark nervules: neuration black, the whole of the transverse nervules margined with smoky blackish; about 35 costal nervules before the pterostigma in the anterior wings; nervules of the post-stigmatal area (confused with the pterostigma) 6 or 7, long, curved, forked at the ends, with sparse cross nervules, forming transverse oblong cellules: a triangular tooth near the base of the inner margin of the anterior wings, sharply defined, narrow, veined, subobtuse, the base of the inner margin being deeply and semicircularly excavated before the tooth. Length of body, 36 mm. Expanse of wings, 69 mm. Length of anterior wing, 32 mm.; greatest breadth, 10½ mm. Length of posterior wing, 29 mm.

Hab. Mardin in Mesopotamia; one ♂ in the collection of Mr. Albarda, of Leeuwarden.

When defining the genus *Idricerus* in my 'Classification of the Family *Ascalaphidæ*' (Journ. Linn. Soc., Zool., vol. xi.), I placed it, in the tabular synopsis, in a section in which the anterior wings are "haud appendiculatæ"; but I had already shown that in at least one species of *Haploglenius* (likewise holophthalmous) the wings are exceptionally appendiculate: in effect it is sometimes difficult to draw the line between what in some cases is only a prominent angle, and in others a tooth. I leave the insect doubtfully in *Idricerus*.

This is a very striking species from its coloration (in less mature individuals the wings are probably paler), and also from the process on the dorsum of the abdomen in the ♂, but approach towards, or modifications of, such a formation, are not uncommon in *Ascalaphidæ*, and nearly a parallel may be found in *Ptynx furciger*, p. 509, *ante*.

